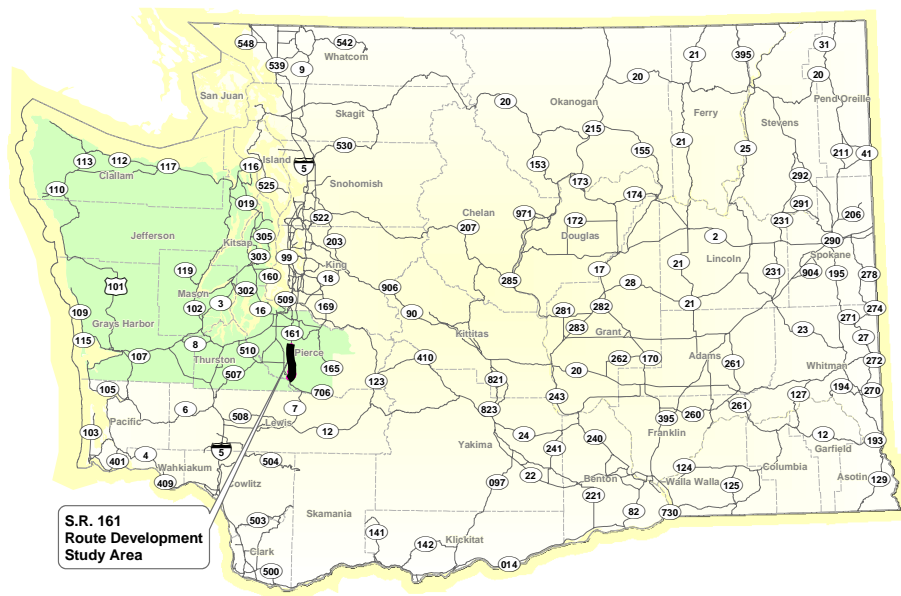


S.R. 161 Route Development Plan

SR 7 to Graham



Prepared with the assistance of:

City of Eatonville
Community of Graham
Pierce County
Pierce Transit

Puget Sound Regional Council
Eatonville Chamber of Commerce
National Park Service
Northwest Trek Wildlife Park



**Washington State
Department of Transportation**
Olympic Region

EXECUTIVE SUMMARY

The Stakeholder Vision

A committee of transportation stakeholders was formed in April 2003 for the purpose of building the vision, goals and objectives for the route development. This Stakeholder Committee represented a variety of transportation interests in the communities near the route. The stakeholder effort involved a wide range of individuals, including staff and volunteers from Pierce County, the Town of Eatonville, and the state legislature. They met five times between April and October. Their initial responsibility was to determine, and interpret, a fundamental vision for the route in 2022. The vision discussion during meeting two was comprehensive, and led to a consensus statement approved by those who were present:

The SR 161, the backbone of a safe, efficient and pleasant transportation system, promotes a diverse system of mobility, preserves the integrity of the rural landscape, and serves the needs of our community and visitors.

The committee developed a specific list of route development goals that fulfilled the intent of this vision, basing these goals on their knowledge about the communities involved, their interpretation of the transportation needs of the area, and the specific public input generated over the course of the study. At each step along the way, the vision of the stakeholder committee was maintained. The committee was assured of this by their direct involvement in the generation and approval of route development goals, objectives, specific decision criteria, and RDP recommendations.

The committee's efforts were supported by information gathered about the study in six community meetings, and in technical reports prepared and presented by representatives from the WSDOT Olympic Region Planning Office. The committee's decisions were always made in direct consultation with these same representatives.

The Study

This Route Development Plan (RDP) is a twenty-year plan that provides WSDOT with the information it needs for making decisions about future transportation requirements. The study area covered by this plan is that portion of SR 161 between SR 7 south of Eatonville (MP 0.00), and 234th Street in Graham (MP 17.58). The highway is a north-south arterial serving south Pierce County, with milepost values increasing in the northbound direction. It is a two lane highway, except between MP 16.1 and 17.4 (Graham Hill) where a climbing lane was constructed in each direction about ten years ago. The route connects the communities of Eatonville, Kapowsin, and their outlying areas, with Tacoma and central Puget Sound. It is a regional route,

that provides connections to the south as well, such as to Mount Rainier National Park, White Pass and the Cascade Mountains, and the I-5 corridor. Commercial interests, in particular the gravel operation near Eatonville, and the landfill near Kapowsin, are important commercial interests on the route.

The RDP study process involved a technical analysis of the expected land use changes, and travel demand changes along the route, as well as a public involvement process. Public involvement included the convening of five Stakeholder Committee meetings and six public meetings (see above). Information generated at these meetings, as well as technical information generated by Pierce County and WSDOT, helped inform the stakeholder decision-making process. Using this information, the Stakeholder Committee approved a set of recommendations that addressed the forecast deficiencies on the route at their October 21, 2003 meeting.

The Recommendations

The criteria for determining whether traffic congestion conditions warrant the construction of capacity improvements for routes in Pierce County are established by the Puget Sound Regional Council (PSRC). A technical analysis of the facility, and expected traffic volumes, provides a level of service (LOS) measurement for discrete, uniform segments of the route. The minimum acceptable level of service value for routes like SR 161 has been set at “C” by PSRC. The technical analysis for SR 161 shows that most of the route will be below “C”, based on traffic forecasts for 2022. The recommendations developed and endorsed by the Stakeholder Committee ensure that the level of service for the route will be improved to an acceptable level (“C” or better). These recommendations are organized into six, relatively uniform, segments for purposes of analyzing and reporting.

A map showing the location of these recommendations is shown in Figure S-1.

Segment 1 – Mashell Valley (MP 0.0 to 2.3)

The LOS on segment 1, which is that portion of the route south of Eatonville, was found to be acceptable in 2022. There were no recommendations for this segment.

Segment 2 – Eatonville (MP 2.3 to 3.3)

Ideas for improvements within Eatonville, especially that portion north of Center Street (at MP 3.0, also known as Washington Street), have been collected as part of this study, and have been forwarded to the town to be considered as part of their comprehensive planning process. The only recommendations endorsed for inclusion in the RDP are the installation of a traffic signal at Center Street, and a park and ride lot somewhere within the town to serve commuters using the route.

Segment 3 – Ohop Valley (MP 3.3 to 6.1)

A third, or auxiliary, lane is recommended along the section of highway between Eatonville and the Eatonville Cutoff Road. This lane is southbound closer to Eatonville (MP 3.3 to 4.3) and northbound from MP 4.3 to MP 6.1. This extra lane acts primarily as a climbing lane, but also provides a transition lane for northbound traffic bound for Eatonville Cutoff Road. A traffic signal is also proposed for the Eatonville Cutoff Road intersection.

Several other intersections along this segment (Ski Park Road/Ohop Extension Road – MP 4.0, Orville Road – MP 4.3, and Ohop Valley Road – MP 5.5) have been identified for improvements, including the creation of center turn and acceleration lanes. The sharp angle of intersection between SR 161 and Ohop Valley Extension Road presents a difficult maneuver for some intersection movements. Because the surrounding terrain would make realigning the intersection difficult, it is recommended that the SR 161 southbound right turn be forbidden. Another intersection with a similar problem (Ohop Creek Road – MP 4.1) is in more favorable terrain, and has been identified for realignment due to the angle it enters the highway.

Segment 4 – Clear Lake/Tanwax Valley (MP 6.1 to 13.2)

North of Eatonville Cutoff Road (at MP 6.1), the traffic volumes are significantly reduced. Two auxiliary lane improvements are recommended: one runs southbound between MP 8.5 to 10.0, and the other runs northbound between MP 10.0 and MP 11.5. These improvements are expected to provide sufficient congestion relief to ensure that LOS is sufficient throughout the entire segment.

Several intersections in this segment have been identified for turn lane improvements: Trek Drive (MP 8.8), South Clear Lake Road (MP 9.0), North Clear Lake Road (MP 9.5), and 352nd Street (MP 9.8). Two other intersections have been identified for realignment: Jensen Road (MP 8.7), and Benston Road (MP 11.1).

Segment 5 – Kapowsin (MP 13.2 to 15.7)

The section between Kapowsin Highway (at MP 13.2) and 264th Street (at MP 15.7) will experience higher traffic volumes, particularly in the afternoon commuter rush hour, in 2022. Therefore, the recommendation here is to provide an auxiliary lane in the southbound direction. A five-lane cross-section is recommended north of 274th Street (at MP 15.1), consisting of an additional northbound lane, and a two-way left turn lane. These extra lanes will provide a reasonable transition between this high volume intersection, and the five-lane section that is recommended for Segment 6.

Segment 6 – Graham Hill (MP 15.7 to 17.6)

A five-lane cross-section is recommended in this segment. This solution was developed through an analysis of the access classification, the traffic safety issues present, and the community interests in this area. When a project is eventually funded to carry out this recommendation, a stipulation has been attached to examine and confirm specific information about the safety, access, and community conditions of this segment prior to moving forward.

One intersection improvement is recommended for this segment at 255th Street (MP 16.3).

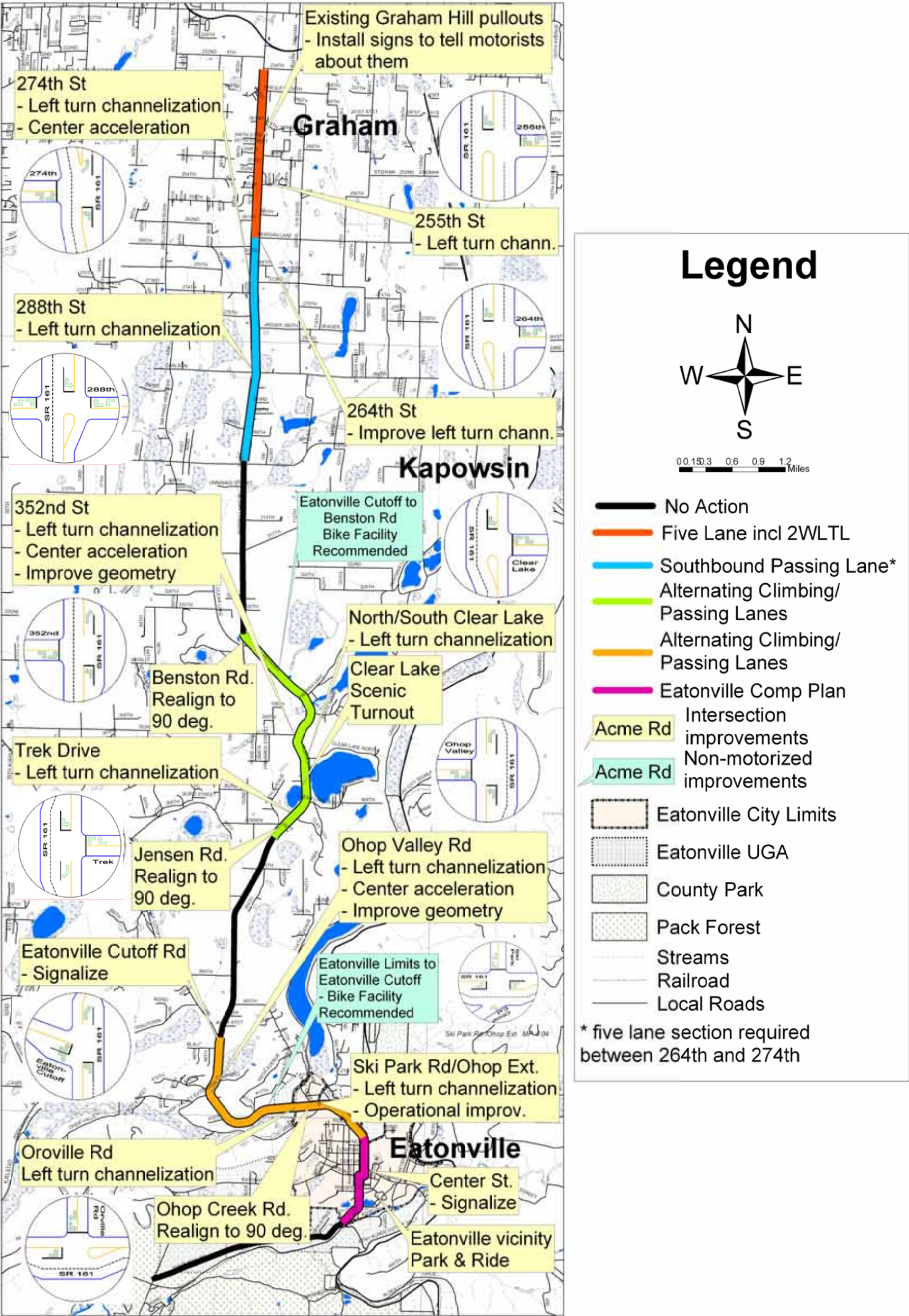


Figure S-1 Summary of RDP Recommendations